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#### UNITED STATES DEPARTMENT OF AGRICULTURE

AGRICULTURAL MARKETING SERVICE

Washington, D. C.

# UNITED STATES STANDARDS

for grades of

# CANNED CREAM STYLE CORN



EFFECTIVE JULY 27, 1953

Fifth Issue

These standards supersede the standards which have been in effect since
July 30, 1952

This is the fifth issue of the United States Standards for Grades of Canned Cream Style Corn. These standards are issued by the Department after careful consideration of all data and views submitted.

These standards were recodified in the Federal Register on December 9, 1953 (18 F.R. 7963) and no change was made except in the format. Section 52.862 was amended (22 F.R. 3535) to become effective July 1, 1957.

As in the case of other standards for processed fruits and vegetables, these standards are designed to serve as a convenient basis for sales, for establishing quality control programs, and for determining loan values. They will also serve as a basis for the inspection of this commodity by Federal inspection service, which is available for the inspection of other processed products as well.

The Department welcomes suggestions which might aid in improving these standards in future revisions. Comments may be submitted to, and copies of these standards obtained from:

Chief, Processed Products Standardization and Inspection Branch Fruit and Vegetable Division Agricultural Marketing Service United States Department of Agriculture Washington 25, D. C.

# UNITED STATES STANDARDS FOR GRADES OF CANNED CREAM STYLE CORN <sup>1</sup>

### Effective July 27, 1953

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#### IDENTITY, COLORS, AND GRADES

§ 52.851 *Identity*. "Canned cream style corn" means the canned product properly prepared from the clean, sound, succulent kernels of sweet corn as defined in the definition and standard of identity for canned corn (21 CFR 51.20) issued pursuant to the Federal Food, Drug, and Cosmetic Act.

§ 52.852 Colors of canned cream style corn. (a) White.

(b) Golden or yellow.

§ 52.853 Grades of canned cream style

corn. (a) "U. S. Grade A" or "U. S. Fancy" is the quality of canned cream style corn that possesses similar varietal characteristics; that is tender; that possesses a good color; that possesses a good consistency; that is practically free from defects; that possesses a very good flavor; and that for those factors which are scored in accordance with the scoring system outlined in this subpart the total score is not less than 90 points: Provided, That the cream style corn may possess a reasonably good color, a reasonably good consistency, a good flavor, and may be reasonably tender, scoring not less than 26 points if the total score is not less than 90 points.

(b) "U. S. Grade B" or "U. S. Extra Standard" is the quality of canned cream style corn that possesses similar varietal characteristics; that is reasonably tender; that possesses a reasonably good color: that possesses a reasonably good consistency; that is reasonably free from defects; that possesses a good flavor; and that for those factors which are scored in accordance with the scoring system outlined in this subpart the total score is not less than 80 points: Provided, That the cream style corn may possess a fairly good color, scoring not less than 7 points if the total score is not less than 80 points.

(c) "U. S. Grade C" or "U. S. Standard" is the quality of canned cream style corn that possesses similar varietal characteristics; that is fairly tender; that possesses a fairly good color; that possesses a fairly good consistency; that is fairly free from defects; that possesses a fairly good flavor; and that scores not less than 70 points when scored in ac-

<sup>&</sup>lt;sup>1</sup> The requirements of these standards shall not excuse failure to comply with the provisions of the Federal Food, Drug, and Cosmetic Act.

cordance with the scoring system outlined in this subpart.

(d) "Substandard" is the quality of canned cream style corn that fails to meet the requirements of U.S. Grade C or U.S. Standard and may or may not meet the minimum standards of quality for canned cream style corn issued pursuant to the Federal Food, Drug, and Cosmetic Act.

#### FILL OF CONTAINER

§ 52.854 Fill of container for canned cream style corn. The standard of fill of container for canned cream style corn is not incorporated in the grades of the finished product, since fill of container, as such, is not a factor of quality for the purpose of these grades. The standard fill of container for canned cream style corn is a fill of not less than 90 percent of the total capacity of the container. Canned cream style corn that does not meet this requirement is "Below standard in fill."

#### FACTORS OF QUALITY

§ 52.855 Ascertaining the grade. (a) The grade of canned cream style corn is ascertained by considering, in conjunction with the requirements of the respective grade, the respective ratings for the factors of color, consistency, absence of defects, tenderness and maturity, and flavor.

(b) The relative importance of each factor which is scored is expressed numerically on the scale of 100. The maximum number of points that may be given each such factor is:

Factor:	Points
Color Consistency Absence of defects Tenderness and maturity Flavor	20 20 30
Total score	100

§ 52.856 Ascertaining the rating for the factors which are scored. The essential variations within each factor which is scored are so described that the value may be ascertained for each factor and expressed numerically. The numerical range within each factor which is scored

is inclusive (for example, "18 to 20 points" means 18, 19, or 20 points).

- § 52.857 Color—(a) (A) classification. Canned cream style corn that possesses a good color may be given a score of 9 or 10 points. "Good color" means that the cut kernels possess a practically uniform color typical of tender sweet corn and that the product is bright and is practically free from "off-variety" kernels.
- (b) (B) classification. Canned cream style corn that possesses a reasonably good color may be given a score of 8 points. "Reasonably good color" means that the kernels possess a reasonably uniform color typical of reasonably tender sweet corn, and that the product may lack brightness but not to the extent that the appearance is materially affected, and is reasonably free from "off-variety" kernels.
- (c) (C) classification. Canned cream style corn that possesses a fairly good color may be given a score of 6 or 7 points. Canned cream style corn that scores 7 points in this classification shall not be graded above U.S. Grade B or U. S. Extra Standard, and if scored 6 points in this classification shall not be graded above U.S. Grade C or U.S. Standard, regardless of the total score for the product (this is a partial limiting rule). "Fairly good color" means that the kernels possess a fairly uniform color typical of fairly tender sweet corn and that the product may be dull, but not to the extent that the appearance is seriously affected, and is fairly free from "off-variety" kernels.
- (d) (SStd) classification. Canned cream style corn that fails to meet the requirements of paragraph (c) of this section may be given a score of 0 to 5 points and shall not be graded above Substandard, regardless of the total score for the product (this is a limiting rule).
- § 52.858 Consistency—(a) General. The factor of consistency refers to the viscosity of the product, to the degree of smoothness, and to the separation of free liquor.

- style corn that possesses a good consistency may be given a score of 18 to 20 points. "Good consistency" means that the canned cream style corn, after stirring and emptying from the container to a dry flat surface, possesses a heavy cream-like consistency, with not more than a slight appearance of curdling, forms a slightly mounded mass, and that at the end of two minutes after emptying on the dry flat surface there is practically no separation of free liquor.
- (c) (B) classification. If the canned cream style corn has a reasonably good consistency a score of 16 or 17 points may be given. "Reasonably good consistency" means that the canned cream style corn, after stirring and emptying from the container to a dry flat surface. has a reasonably good creamy consistency, with not more than a moderate appearance of curdling, may flow just enough to level off to a nearly uniform depth or may be moderately stiff and moderately mounded, and that at the end of two minutes after emptying on the dry flat surface there may be a slight separation of free liquor.
- (d) (C) classification. Canned cream style corn that has a fairly good consistency may be given a score of 14 or 15 points. Canned cream style corn that falls into this classification shall not be graded above .U. S. Grade C or U. S. Standard, regardless of the total score for the product (this is a limiting rule). "Fairly good consistency" means that the canned cream style corn, after stirring and emptying on a dry flat surface. may be thin but not excessively thin, or thick but not excessively dry, pasty, or crumbly, or moderately but not excessively curdled, and that at the end of two minutes after emptying on the dry flat surface there may be a moderate but not excessive separation of free liquor. The approximate circular area over which the product spreads when emptied on a dry flat surface shall not exceed 12 inches: Provided. That when washed, drained residue of canned cream style corn contains more than 20 percent of alcohol insoluble solids, the

- average diameter of the area over which the product spreads shall not exceed 10 inches.<sup>2</sup>
- (e) (SStd) classification. Canned cream style corn that fails to meet the requirements of paragraph (d) of this section may be given a score of 0 to 13 points and shall not be graded above Substandard, regardless of the total score for the product (this is a limiting rule), and may also be graded "Below Standard in Quality" for the following reason: Excessively liquid.
- § 52.859 Absence of defects—(a) General. The factor of absence of defects refers to the degree of freedom from pieces of cob, husk, silk, or other harmless extraneous vegetable matter, from pulled kernels, and from discolored kernels or other defects.
- (b) (A) classification. Canned cream style corn that is practically free from defects may be given a score of 18 to 20 points. "Practically free from defects" means that pieces of cob, husk, silk, or other harmless extraneous vegetable matter, pulled kernels, discolored kernels, or other defects may be present that do not more than slightly affect the appearance or eating quality of the product.
- (c) (B) classification. If the canned cream style corn is reasonably free from defects, a score of 16 or 17 points may be given. Canned cream style corn that falls into this classification shall not be graded above U. S. Grade B or U. S. Extra Standard, regardless of the total score for the product (this is a limiting rule). "Reasonably free from defects" means that pieces of cob, husk, silk, or other harmless extraneous vegetable matter, pulled kernels, discolored kernels, or other defects may be present that do not materially affect the appearance or eating quality of the product.
- (d) (C classification. Canned cream style corn that is fairly free from defects

<sup>&</sup>lt;sup>2</sup> Determined as outlined in the Standard of Quality for Canned Sweet Corn (21 CFR 51.21) promulgated under the Federal Food, Drug, and Cosmetic Act.

may be given a score of 14 or 15 points. Canned cream style corn that falls into this classification shall not be graded above U. S. Grade C or U. S. Standard, regardless of the total score for the product (this is a limiting rule). "Fairly free from defects" means that pieces of cob, husk, silk, or other harmless extraneous vegetable matter, pulled kernels, discolored kernels, or other defects may be present that do not seriously affect the appearance or eating quality of the product, and that:

- (1) For each 20 ounces of net weight there may be present:
- (j) Not more than 1 cubic centimeter of pieces of cob; <sup>2</sup> and
- (ii) Not more than 1 square inch (1" x 1") of husk; 2 and that
- (2) For each 2 ounces of net weight there may be present:
- (i) Not more than 1 brown or black discolored kernel or piece of kernel; <sup>2</sup> and that
- (3) For each 1 ounce of net weight there may be present:
  - (i) Not more than 6 inches of silk.2
- (e) (SStd) classification. Canned cream style corn that fails to meet the requirements of paragraph (d) of this section may be given a score of 0 to 13 points and shall not be graded above Substandard, regardless of the total score for the product (this is a limiting rule), and may also be graded "Below Standard in Quality" for the applicable reasons:
  - (1) Excessive discolored kernels.
  - (2) Excessive cob.
  - (3) Excessive husk.
  - (4) Excessive silk.

\$ 52.860 Tenderness and maturity—(a) (A) classification. Canned cream style corn that is tender may be given a score of 27 to 30 points. "Tender" means that the kernels are in the milk, early

cream, or middle cream stage of maturity, have a tender texture, and that pieces of the interior portions of corn kernels or ground kernels are characteristic of sweet corn in the milk, early cream, or middle cream stage of maturity.

- (b) (B) classification. If the canned cream style corn is reasonably tender a score of 24 to 26 points may be given. Canned cream style corn that scores less than 26 points in this classification shall not be graded above U.S. Grade B or U. S. Extra Standard, regardless of the total score for the product (this is a partial limiting rule). "Reasonably tender" means that the kernels are in the middle cream stage to late cream stage of maturity, have a reasonably tender texture, and that pieces of the interior portions of corn kernels or ground kernels are characteristic of sweet corn in the middle cream to late cream stage of maturity.
- (c) (C) classification. Canned cream style corn that is fairly tender may be given a score of 22 or 23 points. Canned cream style corn that falls into this classification shall not be graded above U.S. Grade C or U. S. Standard, regardless of the total score for the product (this is a limiting rule). "Fairly tender" means that the kernels are in the early dough or dough stage of maturity, may be firm but not hard or tough, and that pieces of the interior portions of corn kernels or ground kernels are characteristic of sweet corn in the early dough or dough stage of maturity. The weight of the alcohol insoluble solids of the washed, drained material 2 does not exceed 27 percent of the weight of such material.
- (d) (SStd) classification. Canned cream style corn that fails to meet the requirements of paragraph (c) of this section may be given a score of 0 to 21 points and shall not be graded above Substandard, regardless of the total score for the product (this is a limiting rule), and may also be graded "Below Standard in Quality."

§ 52.861 Flavor—(a) General. The factor of flavor refers to the palatability of the product. The natural flavor of the sweet corn and the effects of added

<sup>&</sup>lt;sup>2</sup> Determined as outlined in the Standard of Quality for Canned Sweet Corn (21 CFR 5).21) promulgated under the Federal Food, (2.12) and Cosmetic Act.

sugar (sucrose) and salt are considered in evaluating this factor.

- (b) (A) classification. Canned cream style corn that possesses a very good flavor may be given a score of 18 to 20 points. "Very good flavor" means that the product including added seasoning ingredients has a very good characteristic flavor and odor typical of tender canned sweet corn.
- (c) (B) classification. If the canned cream style corn possesses a good flavor, a score of 16 or 17 points may be given. "Good flavor" means that the product including added seasoning ingredients has a good characteristic flavor and odor typical of reasonably tender canned sweet corn.
- (d) (C) classification. Canned cream style corn that possesses a fairly good flavor may be given a score of 14 or 15 points. Canned cream style corn that falls into this classification shall not be graded above U.S. Grade C or U.S. Standard, regardless of the total score for the product (this is a limiting rule). "Fairly good flavor" means that the product may be lacking in good flavor and odor but is free from objectionable flavors and objectionable odors of any kind.
- (e) (SStd) classification. Canned cream style corn that fails to meet the requirements of paragraph (d) of this section may be given a score of 0 to 13 points and shall not be graded above Substandard, regardless of the total score for the product (this is a limiting rule).

LOT INSPECTION AND CERTIFICATION § 52.862 Ascertaining the grade of a lot. The grade of a lot of canned cream style corn covered by these standards is determined by the procedures set forth in the Regulations Governing Inspection and Certification of Processed Fruits and Vegetables, Processed Products Thereof, and Certain Other Processed Food Products (§§ 52.1 to 52.87).

#### SCORE SHEET

§ 52.863 Score sheet for canned cream stule corn.

Number, size, and kind of container	
Container mark's or identification	
Label	
Net weight (ounces)	
Vacuum (inches)	
Color (white or golden)	
T 4:	

Factors		Score points
Color	10	(A) 9-10 (B) 8 (C) 1-6-7 (SStd.) 20-5 (A) 18-20 (B) 16-17 (C) 214-15 (SStd.) 20-13 (A) 18-20 (B) 216-17 (C) 14-15 (SStd.) 20-13 (A) 27-30 (B) 124-26 (C) 22-23 (SStd.) 20-20
Consistency	20	
A bsence of defects	20	
Γenderness and maturity	. 30	
Plavor	20	(A) 18-20 (B) 16-17 (C) 14-15 (SStd.) 20-13
Total score	100	

<sup>&</sup>lt;sup>1</sup> Indicates partial limiting rule. <sup>2</sup> Indicates limiting rule.

Recodified in the Federal Register of December 9, 1953 (18 F.R. 7963) Section 52.862 amended May 22, 1957 (22 F.R. 3535)

#### EXCERPT FROM TITLE 21 -- FOOD AND DRUGS

CHAPTER 1 -- FOOD AND DRUG ADMINISTRATION, U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE; PART 51 -- CANNED VEGETABLES

### Definitions and Standards of Identity; Quality; and Fill of Container

- § 51.20 Canned corn, canned sweet corn, canned sugar corn; identity; label statement of optional ingredients. (a) Canned corn, canned sweet corn, canned sugar corn is the food consisting of one of the corn ingredients specified in paragraph (b) of this section, with water necessary for proper preparation and processing. It may be seasoned or garnished with one or more of the following optional ingredients:
  - (1) Salt.
  - (2) Sugar (sucrose).
- (3) Pieces of sweet red peppers or sweet green peppers or hot red peppers or hot green peppers or a mixture of any two or more of these.

It is sealed in a container and so processed by heat as to prevent spoilage.

- (b) The corn ingredients referred to in paragraph (a) of this section consist of succulent sweet corn of the white or yellow color groups, or mixtures of these, and are as follows:
- (1) Cut kernels from which the hulls have not been separated.
- (2) Pieces of the inner portion of the corn kernel substantially free from hull.
- (3) Ground kernels from which the hulls have not been separated.
- (4) A mixture of the form described in subparagraph (1) of this paragraph with one or both of the forms described in subparagraphs (2) and (3) of this paragraph. When necessary to insure smoothness, starch may be added, in a quantity not more than sufficient for that purpose.

(5) Cut and cooked kernels from which most of the moisture has been evaporated.

In preparing each of the foregoing corn ingredients, the tip caps are removed.

- (c) (1) The name of the food is:
  "Corn" or "Sweet Corn" or "Sugar Corn"
  with the name of the color group used,
  "White," "Yellow," or "Golden," or with
  the names of the color groups used,
  "White and Yellow" or "White and
  Golden," when the white color group
  predominates, and "Yellow and White"
  or "Golden and White," when the yellow color group predominates, and with:
- (i) The words "Whole Kernel" or "Whole Grain," when the corn ingredient specified in paragraph (b) (1) of this section is used. When the weight of the liquid in the container, as determined by the method prescribed in § 51.21 (b) (1), is not more than 20 percent of the net weight, and the container is closed under conditions creating a high vacuum in the container, the words "Vacuum Pack" or "Vacuum Packed" also are part of the name.
- (ii) The word "Fritter," when the corn ingredient specified in paragraph (b) (2) of this section is used.
- (iii) The word "Ground," when the corn ingredient specified in paragraph (b) (3) of this section is used.
- (iv) The words "Cream Style," when the corn ingredient specified in paragraph (b) (4) of this section is used.
- (v) The word "Evaporated," when the corn ingredient specified in paragraph

(b) (5) of this section is used.

(2) The parts of the name as specified in subparagraph (1) of this paragraph may be arranged in any order of precedence. The varietal name of the corn used may intervene between parts of the name of the food. For the purpose of arrangement of the name, the words "Sweet" and "Corn" may be treated as separate parts of the name. When the varietal name immediately precedes or follows the name or intervenes between parts of the name of the food and it accurately designates the color of the corn ingredient, no other designation of the color group need be made.

or "With hot red peppers."

(2) When the optional starch ingredient specified in paragraph (b) (4) of this section is used, the label shall bear the statement "Starch added to insure smoothness."

- (e) Wherever the name of the food appears on the label so conspicuously as to be easily seen under customary conditions of purchase, the words and statements prescribed by paragraph (d) of this section shall immediately and conspicuously precede or follow such name, without intervening written, printed, or graphic matter, except that the varietal name of the corn used may so intervene.
- § 51.21 Canned corn, canned sweet corn, canned sugar corn; quality; label statement of substandard quality. (a) The standard of quality for canned corn is as follows:
- (1) When tested by the method prescribed in paragraph (b) of this section, canned corn in which the corn ingredient is whole-kernel corn (§ 51.20 (b) (1)) or evaporated corn (§ 51.20 (b) (5)):
- (i) Contains not more than one brown or black discolored kernel or piece of

kernel for each 2 ounces of drained weight:

(ii) Contains not more than 1 cubic centimeter of pieces of cob for each 14 ounces of drained weight;

(iii) Contains not more than 1 square inch of husk for each 14 ounces of

drained weight: and

(iv) Contains not more than 7 inches of silk for each 1 ounce of drained weight.

- (2) When tested by the method prescribed in paragraph (c) of this section, canned corn in which the corn ingredient is fritter corn (§ 51.20 (b) (2)), ground corn (§ 51.20 (b) (3)), or creamstyle corn (§ 51.20 (b) (4)):
- (i) Contains not more than one brown or black discolored kernel or piece of kernel for each 2 ounces of net weight;

(ii) Contains not more than 1 cubic centimeter of pieces of cob for each 20 ounces of net weight;

(iii) Contains not more than 1 square inch of husk for each 20 ounces of net weight:

(iv) Contains not more than 6 inches of silk for each 1 ounce of net weight; and

- (v) Has a consistency such that the average diameter of the approximately circular area over which the prescribed sample spreads does not exceed 12 inches, except that, in the case of cream-style corn the washed drained material of which contains more than 20 percent of alcohol-insoluble solids, the average diameter of the approximately circular area over which the prescribed sample spreads does not exceed 10 inches.
- (3) (i) The weight of the alcohol-insoluble solids of whole-kernel corn (§ 51.20 (b) (1)) does not exceed 27 percent of the drained weight, when tested by the method prescribed in paragraph (b) of this section.
- (ii) The weight of the alcohol-insoluble solids of the washed drained material of cream-style corn (§ 51.20 (b) (4)) does not exceed 27 percent of the weight of such material, when tested by the method prescribed in paragraph (c) of this section.
  - (b) The method referred to in para-

graph (a) of this section for testing whole-kernel corn (§ 51.20 (b) (1)) and evaporated corn (§ 51.20 (b) (5)) is as follows:

(1) Determine the gross weight of the container. Open and distribute the contents of the container over the meshes of an 8-mesh circular sieve which has previously been weighed. The diameter of the sieve is 8 inches if the quantity of the contents of the container is less than 3 pounds, and 12 inches if such quantity is 3 pounds or more. The bottom of the sieve is woven-wire cloth which complies with the specifications for such cloth set forth under "2380 Micron (No. 8)" in Table I of "Standard Specifications for Sieves," published March 1, 1940, in L. C. 584 of the U. S. Department of Commerce, National Bureau of Standards. Without shifting the material on the sieve, so incline the sieve as to facilitate drainage. Two minutes from the time drainage begins. weigh the sieve and the drained material. Record, in ounces, the weight so found, less the weight of the sieve, as the drained weight. Dry and weigh the empty container and subtract this weight from the gross weight to obtain the net weight. Calculate the percent of drained liquid in the net weight.

(2) Pour the drained material from the sieve into a flat tray and spread it in a layer of fairly uniform thickness. Count, but do not remove, the brown or black discolored kernels or pieces of kernel and calculate the number per 2 ounces of drained material. Remove pieces of silk more than ½-inch long, husk, cob, and any pieces of material other than corn. Measure the aggregate length of such pieces of silk and calculate the length of silk per 1 ounce of drained weight. Spread the husk flat. measure its aggregate area, and calculate the area of husk per 14 ounces of drained weight. Place all pieces of cob under a measured amount of water in a cylinder which is so graduated that the volume can be measured to 0.1 cubic centimeter. Take the increase in volume as the aggregate volume of the cob and calculate the volume of cob per 14 ounces of drained weight.

(3) If the corn is whole kernel (§ 51.20

(b) (1)), comminute a representative 100-gram sample of the drained corn from which the silk, husk, cob, and other material which is not corn (i. e., peppers) have been removed. An equal amount of water is used to facilitate this operation. Weigh to nearest 0.01 gram a portion of the comminuted material equivalent to approximately 10 grams of the drained corn into a 600-cubic centimeter beaker. Add 300 cubic centimeters of 80-percent alcohol (by volume), stir, cover beaker, and bring to a boil. Simmer slowly for 30 minutes. Fit a Buchner funnel with a previously prepared filter paper of such size that its edges extend ½ inch or more up the vertical sides of the funnel. The previous preparation of the filter paper consists of drying it in a flat-bottomed dish for 2 hours at 100° C., covering the dish with a tightfitting cover, cooling it in a desiccator, and promptly weighing to the nearest-0.001 gram. After the filter paper is fitted to the funnel, apply suction and transfer the contents of the beaker to the funnel. Do not allow any of the material to run over the edge of the paper. Wash the material on the filter with 80-percent alcohol (by volume) until the washings are clear and color-Transfer the filter paper with the material retained thereon to the dish used in preparing the filter paper. Dry the material in a ventilated oven, without covering the dish, for 2 hours at 100° C. Place the cover on the dish, cool it in a desiccator, and promptly weigh to the nearest 0.001 gram, From this weight subtract the weight of the dish. cover, and paper as previously found. Calculate the remainder to percentage.

(c) The method referred to in paragraph (a) of this section for testing fritter corn (§ 51,20 (b) (2)), ground corn (§ 51.20 (b) (3)), and cream-style corn (§ 51.20 (b) (4)) is as follows:

(1) Allow the container to stand at least 24 hours at a temperature of 68° F. to 85° F. Determine the gross weight, open, transfer the contents into a pan, and mix thoroughly in such a manner as not to incorporate air bubbles. (If the net contents of a single container is less than 18 ounces, determine the gross weight, open, and mix the contents of

the least number of containers necessary to obtain 18 ounces.) Fill level full a hollow, truncated cone so placed on a polished horizontal plate as to prevent leakage. The cone has an inside bottom diameter of 3 inches, inside top diameter of 2 inches, and height of 427/32 inches. As soon as the cone is filled, lift it vertically. Determine the average of the longest and shortest diameters of the approximately circular area on the plate covered by the sample 30 seconds after lifting the cone. Dry and weigh each empty container and subtract the weight so found from the gross weight to obtain the net weight.

- (2) Transfer the material from the plate, cone, and pan onto an 8-mesh sieve as prescribed in paragraph (b) (1) of this section. The diameter of the sieve is 8 inches if the quantity of the contents of the container is less than 3 pounds, and 12 inches if such quantity is 3 pounds or more. Set the sieve in a pan. Add enough water to bring the level within 3/8 inch to 1/4 inch of the top of the sieve. Gently wash the material on the sieve by combined up-anddown and circular motion for 30 seconds. Repeat washing with a second portion of water. Remove sieve from pan, incline to facilitate drainage, and drain for 2 minutes.
- (3) From the material remaining on the 8-mesh sieve, count, but do not remove, the brown or black discolored kernels or pieces of kernel and calculate the number per 2 ounces of net weight. Remove pieces of silk more than 1/2-inch long, husk, cob, and other material which is not corn (i. e., peppers). Measure aggregate length of such pieces of silk and calculate the length per ounce of net weight. Spread the husk flat and measure its aggregate area and calculate the area per 20 ounces of net weight. Place all pieces of cob under a measured amount of water in a cylinder which is so graduated that the volume may be measured to 0.1 cubic centimeter. Take the increase in volume as the aggregate volume of the cob and calculate the volume of cob per 20 ounces of net weight. If the corn is cream-style corn (§ 51.20 (b) (4)), take a representative

100-gram sample of the material remaining on the 8-mesh sieve (if such material weighs less than 100 grams take all of it) and determine the alcoholinsoluble solids as prescribed in paragraph (b) (3) of this section for whole-kernel corn.

- (d) If the quality of canned corn falls below the standard prescribed in paragraph (a) of this section, the label shall bear the general statement of substandard quality specified in § 10.2 (a) of this chapter, in the manner and form therein specified; however, if the quality of the canned corn falls below standard with respect to only one of the factors of quality specified by subdivisions (i) to (iv) of paragraph (a) (1) of this section, or by subdivisions (i) to (v) of paragraph (a) (2) of this section, there may be substituted for the second line of such general statement of substandard quality, "Good Food-Not High Grade," a new line as specified after the corresponding subdivision designation of paragraph (a) of this section which the canned corn fails to meet:
- (1) (i) or (2) (i) "Excessive discolored kernels."
  - (1) (ii) or (2) (ii) "Excessive cob."
  - (1) (iii) or (2) (iii) "Excessive husk."
  - (1) (iv) or (2) (iv) "Excessive silk."
    (2) (v) "Excessively liquid."
- § 51.22 Canned corn, canned sweet corn, canned sugar corn where the corn ingredient is in one of the forms known as fritter corn, ground corn, or creamstyle corn; fill of container; label statement of substandard fill. (a) The standard of fill of container for canned corn where the corn ingredient is in one of the forms known as fritter corn (§ 51.20 (b) (2)), ground corn (§ 51.20 (b) (3)), or cream-style corn (§ 51.20 (b) (4)) is a fill of not less than 90 percent of the total capacity of the container, as determined by the general method for fill of containers prescribed in § 10.1 (b) of this chapter.
- (b) If canned fritter corn, canned ground corn, or canned cream-style corn falls below the standard of fill of container prescribed in paragraph (a) of

this section, the label shall bear the general statement of substandard fill specified in § 10.2 (b) of this chapter, in the manner and form therein specified.

ORDER AMENDING DEFINITIONS AND STAND-ARDS OF IDENTITY FOR CERTAIN SPECIFIED CANNED VEGETABLES

3a. In § 51.20 Canned corn, canned sweet corn, canned sugar corn; identity; label statement of optional ingredients, paragraph (a) is amended by renumbering subparagraphs (2) and (3) as (3) and (4), respectively, and inserting the following new subparagraph (2):

#### (2) Monosodium glutamate.

b. Section 51.20 (d) (1) is amended by changing the reference to "paragraph (a) (3)" to "paragraph (a) (4)".

- c. Section 51.20 (d) is further amended by renumbering subparagraph (2) as (3) and inserting the following new subparagraph (2):
- (2) If monosodium glutamate is used, the label shall bear the statement "Monosodium Glutamate Added" or "With Added Monosodium Glutamate."



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